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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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09/331,756

8/23/99

ARAS

888-29

EXAMINER
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TRAN, H.

ART UNIT	PAPER NUMBER
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2611

14

DATE MAILED:

INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) Larry Nixon

(3) Andrew Failor

(2) Hui Tran

(4)

Date of Interview 2/8/01

Type: ☐ Telephonic ☐ Televideo Conference ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No If yes, brief description:

Agreement ☐ was reached. ☒ was not reached.

Claim(s) discussed: 12 and 21

Identification of prior art discussed: Hendricks of record

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed applicant's proposed claims vs. Hendricks (claims 32-35). Discussed differences between Hendricks and applicant's system. Results to follow in amendment.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary. A FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

Examiner Note: You must sign this form unless it is an attachment to another form.

Andrew Failor

ANDREW FAILE

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

ARAS

Atty. Ref.: 888-29

Serial No. 09/331,756

Group: 2711

Filed: August 23, 1999

Examiner: H. Tran

For: **METHOD AND APPARATUS FOR REMOTE  
CONTROL OF A DISTRIBUTED TELEVISION  
BROADCASTING SYSTEM**

DRAFT

\* \* \* \* \*

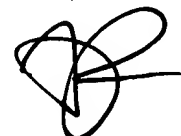
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Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**AMENDMENT UNDER 37 C.F.R. §1.116**  
**(AND PRELIMINARY CPA AMENDMENT)**



In response to the final Office Action dated 11/16/00 (and to a concurrently filed  
CPA request), please further amend this application as shown below:

**IN THE CLAIMS**

Cancel claims 12-31 without prejudice or disclaimer in favor of the following new  
claims 32-55:

--32. A method for remote control of a distributed television broadcasting  
system, said method comprising:

- (a) separately generating and sending respectively corresponding error-corrected digital overlay display data to each of plural remote television broadcast sites via a bi-directional digital signal communication link;
- (b) generating and sending common television program broadcast signals to each of said plural remote television broadcast sites for re-broadcast therefrom;
- (c) generating and sending overlay control signals to each of said plural remote television broadcast sites via non-displayed portions of said television program broadcast signals; and
- (d) using said overlay control signals received at said plural remote television broadcast sites to locally generate and re-broadcast television signals therefrom incorporating displayed images corresponding to previously received digital overlay display data that was separately generated therefor in step (a).

33. A method as in claim 32 wherein said digital overlay display data comprises alphanumeric characters and/or image data.

34. A method as in claim 32 wherein different respectively corresponding digital overlay display data is generated and sent to at least some of said broadcast sites.

35. Apparatus for remote control of a distributed television broadcasting system, said apparatus comprising:

(a) means for separately generating and sending respectively corresponding error-corrected digital overlay display data to each of plural remote television broadcast sites via a bi-directional digital signal communication link;

(b) means for generating and sending common television program broadcast signals to each of said plural remote television broadcast sites for re-broadcast therefrom;

(c) means for generating and sending overlay control signals to each of said plural remote television broadcast sites via non-displayed portions of said television program broadcast signals; and

(d) means for using said overlay control signals received at said plural remote television broadcast sites to locally generate and re-broadcast television signals therefrom incorporating displayed images corresponding to previously received digital overlay display data that was separately generated therefor by said means for separately generating and sending digital overlay data.

36. Apparatus as in claim 35 wherein said digital overlay display data comprises alphanumeric characters and/or image data.

37. Apparatus as in claim 35 wherein different respectively corresponding digital overlay display data is generated and sent to at least some of said broadcast sites.

38. A TV broadcast method for a system to be operated from a TV continuity studio within the control of a broadcast flow unit, said method comprising:

- (a) generating alphanumeric characters and/or image data separately for each of plural remote sites at a central site and transmitting said alphanumeric characters and/or image data therefrom to said plural remote sites via a digital data communication link;
- (b) error correcting said alphanumeric characters and/or image data received at the said remote sites via said link;
- (c) generating and transmitting command codes within non-displayed portions of broadcast television signals to remotely control each of said remote sites from the said central site;
- (d) converting said alphanumeric characters and/or image data to local vision materials with a graphic generator at each of said remote sites;
- (e) at each remote site, overlaying said local vision material synchronously onto a continuing general television signal broadcast from the central site without cutting off the general broadcast television program being re-broadcast by the remote site; and
- (f) detecting whether the said local vision materials have been incorporated in the local re-broadcast via transmission of digital information sent back to the central site.

39. A TV broadcast method as in claim 38 further including:

- (g) producing still or moving alphanumeric characters and/or image data at the central site continuity studio; and

(h) simultaneously transmitting the alphanumeric characters and/or image data to a selected number of said remote sites through a digital data communication link.

40. A TV broadcast method as in claim 38 further including:

(g) controlling and verifying whether the data present at the control site and sent to remote stations have been received correctly by using a modem.

41. A TV broadcast method as in claim 38 further including:

(g) generating and transmitting command codes within the broadcasting process, either automatically or semi-automatically under an operator's control, to remote sites by using the vertical blanking intervals and/or hex numbered pages of the teletext transmission.

42. A TV broadcast method as in claim 38 wherein a decoder at each remote site extracts, decodes, and transfers commands coming through teletext to a remote site computer.

43. A television broadcast method as in claim 38 wherein said command codes from the central managing and controlling site act to control:

(a) functions,

(b) switches between general or differentiated transmissions to a corresponding broadcast area from a storage medium for still or moving character and/or image data to a display producing area in a remote site,

- (c) reports of a control process to a central site continuity studio; and
- (d) starts, stops, differentiation of one or more process.

44. A TV broadcast method as in claim 38 wherein:

(g) said alphanumeric character and/or image data sent from the central site are converted at the remote site to local vision materials as subtitles, graphics, footer, frame, or animation using a graphical generator, decoder, inserter, hard disk and CD-ROM, recorder/reader.

45. A TV broadcast method as in claim 38 wherein hardware at each remote site controls:

- (a) actual overlay of the said local vision materials;
- (b) signal levels from the satellite receiver; and
- (c) output from a cable head end and/or TV transmitter to be within acceptable pre-defined limits.

46. A TV broadcast method as in claim 38 further including:

(g) sending querying data about the operations at the remote site, error reports to the central continuity studio and, when desired, remote site operational information from the continuity studio through modem/telephone network and/or satellite data link.

47. A TV broadcast method for a system to be operated from a TV continuity studio within the control of a broadcast flow unit, said method comprising:

- (a) generating alphanumeric characters and/or image data separately for each of plural remote sites at a central site and transmitting said alphanumeric characters and/or image data therefrom to said plural remote sites via a digital data communication link;
- (b) error correcting said alphanumeric characters and/or image data received at the said remote sites via said link;
- (c) generating and transmitting command codes within non-displayed portions of broadcast television signals to remotely control each of said remote sites from the said central site;
- (d) converting said alphanumeric characters and/or image data to local vision materials with a graphic generator at each of said remote sites;
- (e) at each remote site, overlaying said local vision material synchronously onto a continuing general television signal broadcast from the central site without cutting off the general broadcast television program being re-broadcast by the remote site; and
- (f) detecting whether the said local vision materials have been incorporated in the local re-broadcast via transmission of digital information sent back to the central site.

48. A TV broadcast method as in claim 38 further including:

- (g) producing still or moving alphanumeric characters and/or image data at the central site continuity studio; and



(h) simultaneously transmitting the alphanumeric characters and/or image data to a selected number of said remote sites through a digital data communication link.

49. A TV broadcast method as in claim 38 further including:

(g) controlling and verifying whether the data present at the control site and sent to remote stations have been received correctly by using a modem.

50. A TV broadcast method as in claim 38 wherein a decoder at each remote site extracts, decodes, and transfers commands coming through teletext to a remote site computer.

51. A TV broadcast method as in claim 38 further including:

(g) generating and transmitting command codes within the broadcasting process, either automatically or semi-automatically under an operator's control, to remote sites by using the vertical blanking intervals and/or hex numbered pages of the teletext transmission.

52. A television broadcast method as in claim 38 wherein said command codes from the central managing and controlling site act to control:

(a) functions,

(b) switches between general or differentiated transmissions to a corresponding broadcast area from a storage medium for still or moving character and/or image data to a display producing area in a remote site,

- (c) reports of a control process to a central site continuity studio; and
- (d) starts, stops, differentiation of one or more process.

53. A TV broadcast method as in claim 38 wherein:

(g) said alphanumeric character and/or image data sent from the central site are converted at the remote site to local vision materials as subtitles, graphics, footer, frame, or animation using a graphical generator, decoder, inserter, hard disk and CD-ROM, recorder/reader.

54. A TV broadcast method as in claim 38 wherein hardware at each remote site controls:

- (a) actual overlay of the said local vision materials;
- (b) signal levels from the satellite receiver; and
- (c) output from a cable head end and/or TV transmitter to be within acceptable pre-defined limits.

55. A TV broadcast method as in claim 38 further including:

(g) sending querying data about the operations at the remote site; error reports to the control continuity studio and, when desired, remote site operational information from the continuity studio through modem/telephone network and/or satellite data link.

**REMARKS**

Reconsideration of this application is respectfully requested.

It is assumed that the Examiner intended to reject claims 12-14, 16, 17, 19-24, 26, 27 and 29-31 under 35 U.S.C. §102 as allegedly anticipated by Hendricks et al '195. It is also assumed that the Examiner intended to reject all remaining claims (15, 18, 25 and 28) under 35 U.S.C. §103 as allegedly being made "obvious" based on a combination of Hendricks et al '195 and Hendricks et al '297. Such grounds of rejection are all respectfully traversed.

It is respectfully submitted that the Examiner's analysis of these references and/or of applicant's claimed invention is erroneous in many respects. Applicant's claims have now been replaced by a new more focussed set of claims (in conjunction with a CPA request being concurrently filed in view of the "final" designation of the outstanding Office Action). However, in an attempt to help insure against continued misunderstanding, the applicant will nevertheless initially discuss at least some of the Examiner's errors with respect to the earlier claims 12-31. It is hoped that this initial discussion will facilitate a better understanding of the cited prior art and of the applicant's described and claimed invention (e.g., when applicant's present more focussed new claims 32-55 are discussed below).

The Examiner alleges that all claims except claims 15, 18, 25 and 28 are anticipated by Hendricks '195. Hendricks '195 indicates that it is directed to a cable head end capable of handling both analog and digital TV signals. It appears that all programming video material (whether overlays or complete new video) must come via satellite down/up links while control signals come via a landline/modem...while the "improved" embodiment of Figure 11 does not seem to even have a landline/modem.

Thus, contrary to Examiner's allegations, Hendricks '195 does not teach or suggest transmitting any alternate program data to any remote site via an auxiliary bi-directional digital signal communication link. For example, this is not taught at column 20, lines 35-65 as alleged by the Examiner.

Furthermore, Hendricks '195 does not teach or suggest coordinating error correction of both control signals and alternate program data via the auxiliary bi-directional digital link. Column 14, lines 12-18, column 17, lines 14-30 or column 18, lines 1-20 cited by the Examiner do not support these allegations.

The Examiner's attempt to find interruption of the broadcast re-transmission while transmitting respectively corresponding alternate program signals locally generated from the control signals and/or alternate program data is based on column 22, lines 10-38. But that portion of the reference is describing the special "improved" Figure 11 embodiment which does not even have any auxiliary control channel (i.e., no landline/modem).

The same deficiency is involved for the next two allegations made by the Examiner on page 3 of the action.

The undersigned also cannot find anything like claims 13 and 14 as alleged by the Examiner. Nor is there anything in Hendricks '195 about providing uplink data (via any channel of communication) as to whether corresponding locally generated video has actually been received and re-broadcast -- nor any uplinked reports of the results of a control process to a central site continuity studio (i.e., an error message is something else...and this is really all that is described at column 18, lines 1-10). Nor is there any operation or error report described (e.g., at column 13, lines 21-30 or column 17, line 42 through column 18, line 61).

As for the claims alleged to be "obvious", the Examiner's attempt to combine the Hendricks '927 and '195 teachings is flawed because there is no reason one would try to send control data over VBI line 21 in the Hendricks '195 environment. Hendricks '195 is directed to a cable head end capable of handling fully digital TV signals (e.g., MPEG-2) where there is no line 21 or VBI or the like in which it would make sense to add control signals within and as a part of regular broadcast TV program signals.

In any event, applicant has now cancelled claims 12-31 without prejudice or disclaimer in favor of new claims 32-55 -- which are hopefully more focussed on aspects

of the invention which the Examiner will readily agree find no teaching or suggestion in either of the cited references (whether considered singly or in combination).

It will be noted, for example, that independent method claim 32 requires the separate generation and sending of respectively corresponding error-corrected digital overlay display data to each of plural remote television broadcast sites via a bi-directional digital signal communication link. Claim 32 also requires the generation and sending of common television program broadcast signals to each of those remote broadcast sites for re-broadcast. Claim 32 further requires the generation and sending of overlay control signals to each of the remote sites via non-display portions of the television program broadcast signals. Finally, claim 32 requires using those received overlay control signals at each of the said plural remote sites to locally generate and re-broadcast television signals therefrom which incorporate displayed images corresponding to the previously received digital overlay display data that was separately generated therefor in the first step of this method claim. Dependent claim 33 requires the digital overlay display data to include alpha-numeric character data and/or image data. Claim 34 requires different respectively corresponding digital overlay display data to be generated and sent to at least some of the remote broadcast sites. Apparatus claim 35-37 can be seen to be generally analogous to method claims 32-34.

Independent method claim 38 is also directed to a method for remote control of a distributed television broadcasting system. Here, the first step requires the generation of

alphanumeric characters and/or image data separately for each of plural remote sites at a central site and the transmitting of such data therefrom to plural remote sites via a digital data communication link. Claim 38 further requires error-correcting such received data at the remote sites via that link. Claim 38 further requires generation and transmission of command codes within non-displayed portions of broadcast television signals to remotely control each of the remote sites from the central site. Claim 38 also requires converting the alphanumeric character/image data to local vision materials with a graphic generator at each of the local remote sites. Claim 38 also requires each remote site to overlay such local vision materials synchronously onto a continuing general television broadcast signal from the central site without cutting off the general broadcast television program being re-broadcast by the remote site. Finally, claim 38 requires detecting whether the local vision materials have been incorporated in the local re-broadcast (as intended) via the transmission of digital information sent back to the control site. Dependent claims 39-46 add yet further patentable distinctions. Apparatus claims 47-55 can seem to be analogous in many respects to the method claims 38-46.

Accordingly, this entire application is now believed to be in allowable condition and a formal Notice to that effect is respectfully solicited.

ARAS  
Serial No. 09/331,756

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

Larry S. Nixon  
Reg. No. 25,640

LSN:vc  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100